Inventor

3/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 THOMSON DERWENT. All rts. reserv.

014564953 **Image available**
WPI Acc No: 2002-385656/200242

XRPX Acc No: N02-302027

Tab for container for comestibles comprises rigid lever part, which is connectable to tear part, and flexible operating loop which operates lever part and is movably connected to it

Patent Assignee: IMPRESS BV (IMPR-N)

Inventor: EMMERZAAL A

Number of Countries: 027 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
EP 1205392 A1 20020515 EP 2000203965 A 20001110 200242 B
US 20020088803 A1 20020711 US 200110944 A 20011108 200248

Priority Applications (No Type Date): EP 2000203965 A 20001110 Patent Details:

Patent No Find Ian Da Main TDC

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1205392 A1 E 12 B65D-017/353

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR US 20020088803 A1 B65D-017/34

Abstract (Basic): EP 1205392 A1

NOVELTY - The container tab (170) has a wall (5) with a tear part for opening the container. The tab comprises a rigid lever part, which is connectable to the tear part. A flexible operating loop operates the lever part and is movably connected to it. The loop can be moved out of the plane of the rigid lever part. The lever part comprises at least two sleeves in which the ends of a strand are fixedly arranged. The strand comprises a steel cable.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a container using the above tab.

USE - For opening various types of containers.

ADVANTAGE - Improved comfort for opening container.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of the container with the tab.

Container wall (5) Container tab (170)

pp; 12 DwgNo 1A/17

Title Terms: TAB; CONTAINER; COMESTIBLE; COMPRISE; RIGID; LEVER; PART; CONNECT; TEAR; PART; FLEXIBLE; OPERATE; LOOP; OPERATE; LEVER; PART; MOVE; CONNECT

Derwent Class: Q32.

International Patent Class (Main): B65D-017/34; B65D-017/353

File Segment: EngPI

Description Set Items AU='EMMERZAAL A': AU='EMMERZAAL AD' S1 IDPAT (sorted in duplicate/non-duplicate order) S2 IDPAT (primary/non-duplicate records only) s3 ? show files File 347: JAPIO Oct 1976-2002/Dec(Updated 030402) (c) 2003 JPO & JAPIO File 348: EUROPEAN PATENTS 1978-2003/Apr W03 (c) 2003 European Patent Office File 349:PCT FULLTEXT 1979-2002/UB=20030424,UT=20030417 (c) 2003 WIPO/Univentio File 350:Derwent WPIX 1963-2003/UD, UM &UP=200325 (c) 2003 THOMSON DERWENT File 371:French Patents 1961-2002/BOPI 200209

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10/5/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

05554534 **Image available**

TAB-RAISING DEVICE ATTACHED TO TAB OF ALUMINUM BEVERAGE CAN, ETC.

PUB. NO.: 09-169334 [JP 9169334 A] PUBLISHED: June 30, 1997 (19970630)

INVENTOR(s): FUJIMURA HISAKI

APPLICANT(s): FUJIMURA HISAKI [000000] (An Individual), JP (Japan)

APPL. NO.: 07-353415 [JP 95353415] FILED: December 19, 1995 (19951219)

INTL CLASS: [6] B65D-017/34; B65D-017/347; B65D-017/353

JAPIO CLASS: 31.2 (PACKAGING -- Containers); 11.4 (AGRICULTURE -- Food

Products)

ABSTRACT

PROBLEM TO BE SOLVED: To attach a ring of elastic plastic or the like to a tab so as to make the tab openable by pulling the ring.

SOLUTION: An **elastic** tab-raising device is attached to the **tab** on a **can** for fruit juice, etc. Invariably a hole is opened through such a tab 3 by reason of strength. On this hole a stem 2 is placed and designed to cause a push on the stem 2 to raise a frame 1 by the principle of the lever. By pulling the frame 1 with a finger passed therethrough the tab 3 can be raised simply with no burden on the finger.

10/5/9 (Item 7 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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012566615 **Image available**
WPI Acc No: 1999-372721/199932

XRPX Acc No: N99-278102

Drink can closer for e.g. keeping bees out of opened cans has cover, metal or openatic tab, insert region with projections and stamped reinforcement

Patent Assignee: SPITTEL W (SPIT-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
DE 29900136 U1 19990624 DE 99U2000136 U 19990107 199932 B

Priority Applications (No Type Date): DE 99U2000136 U 19990107

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

DE 29900136 U1 7 B65D-017/32

Abstract (Basic): DE 29900136 U1

NOVELTY - The drink can closer has a cover (1), tab (2), insert region with projections (3, 4) and a stamped reinforcement. It is made of plastic, cardboard or metal. The tab is of metal or plastic with the reinforcement, clamping edge, insert and projections stamped into it. The closer consists of the tab, a plug and a round lid with a clamping edge.

USE - E.g. for keeping bees out of opened cans.

ADVANTAGE - Safer.

DESCRIPTION OF DRAWING(S) - The drawing shows the design and use of

the closer.

Cover (2) Tab (1) Projections (3, 4)

pp; 7 DwgNo 5/6

Title Terms: DRINK; CAN; CLOSE; KEEP; BEE; OPEN; CAN; COVER; METAL; PLASTIC

; TAB; INSERT; REGION; PROJECT; STAMP; REINFORCED

Derwent Class: Q32

International Patent Class (Main): B65D-017/32

File Segment: EngPI

10/5/13 (Item 11 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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010814328 **Image available** WPI Acc No: 1996-311281/199632

XRPX Acc No: N96-261601

Plastics sealing tab for metal drinks can - is inserted under metal lever fixed to can, tab having same shape as opening which is freed by pulling lever upwards, rotation of lever and tab places tab over opening and downward pressure re-seals opening

Patent Assignee: BONNEMAZOU C (BONN-I); MICHEL T (MICH-I)

Inventor: BONNEMAZOU C; MICHEL T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week FR 2728237 Al 19960621 FR 9415209 A 19941216 199632 B

Priority Applications (No Type Date): FR 9415209 A 19941216

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

FR 2728237 A1 6 B65D-017/50

Abstract (Basic): FR 2728237 A

A metal lever (2) already fixed to the can containing a gaseous liquid and a plastics tab (3) inserted under the lever enables resealing can once it has been opened. The plastics tab has the same shape as the can opening (4). When the lever is pulled upwards the lid is lowered inside freeing the opening.

To re-seal the opening the assembly, lever and tab, is rotated about its fixing rivet (1) through 180deg. It is then placed over the opening and by simple pressure the tab hermetically seals the opening. Pulling again on the lever enables the can to be re-opened.

ADVANTAGE - The drinks can be opened and hermetically re-sealed as often as required.

Dwg.1/2

Title Terms: PLASTICS; SEAL; TAB; METAL; DRINK; CAN; INSERT; METAL; LEVER; FIX; CAN; TAB; SHAPE; OPEN; FREE; PULL; LEVER; UP; ROTATING; LEVER; TAB; PLACE; TAB; OPEN; DOWN; PRESSURE; SEAL; OPEN

Derwent Class: Q32

International Patent Class (Main): B65D-017/50

International Patent Class (Additional): B65D-017/34

File Segment: EngPI

10/5/14 (Item 12 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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009764781

WPI Acc No: 1994-044632/199406

XRAM Acc No: C94-019896 XRPX Acc No: N94-035350

Prodn. of lid, esp. for drink or preserve cans - by heat-sealing plastic coating on ring-pull opening tab to lacquered top of can using

heated jaws

Patent Assignee: PECHINEY EMBALLAGE ALIMENTAIRE (PECH)

Inventor: JOUILLART J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week FR 2693170 A1 19940107 FR 928680 A 19920703 199406 B

Priority Applications (No Type Date): FR 928680 A 19920703

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

FR 2693170 A1 42 B65D-017/40

Abstract (Basic): FR 2693170 A

A process is claimed for prodn. of an easily openable lid by heat-sealing a metal panel, having an external protective coating, with a metal opening tab, having an internal heat-sealable coating, to form a connection. The panel includes a peripheral region forming a seal with a container body and a central, at least partly detachable, movable region defined by a line of weakness. The tab includes a gripping ring, a hinged fixing region and a supporting neck adjacent to the line of weakness.

The novel features are that: (a) the heat-sealable coating layer is of thermoplastic having thickness 20-80 microns, at least the outer part of which is heat-sealable; (b) the protective coating is of polymeric material thinner than the heat-sealable layer; and (c) the two layers are heat-sealed using heated jaw (pref. at 200-350 deg.) for sufficient time to give an elastic connection between the layers.

USE/ADVANTAGE - The lids are for food containers, esp. for cans contg. preserves or drinks. Heat-sealing is effected rapidly and reproducibly, with very few rejects. The tab is firmly fixed without using a rivet. A wide variety of materials (including many conventional components) can be used, with the organic material content minimised to facilitate recycling.

Dwq.0/9

Title Terms: PRODUCE; LID; DRINK; PRESERVE; CAN; HEAT; SEAL; PLASTIC; COATING; RING; PULL; OPEN; TAB; LACQUER; TOP; CAN; HEAT; JAW

Derwent Class: A32; A92; G02; M13; P73; Q32

International Patent Class (Main): B65D-017/40

International Patent Class (Additional): B32B-015/08; B32B-031/20

File Segment: CPI; EngPI

10/5/15 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009222964 **Image available**
WPI Acc No: 1992-350385/199243

XRAM Acc No: C92-155546 XRPX Acc No: N92-267103

Injection moulded plastic opening system for can - comprises flange with crosspiece having opening nose, finger grip and reclosure plate which pivots about vertical axis

Patent Assignee: ROETHIG FA HORST (ROET-N)

Inventor: ROETHIG H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week DE 4111364 A 19921015 DE 4111364 A 19910409 199243 B

Priority Applications (No Type Date): DE 4111364 A 19910409

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

DE 4111364 A 6 B65D-017/50

Abstract (Basic): DE 4111364 A

The invention relates to a can opening system attached to the lid of a can . The opener comprises a flange with a flexible cross-piece perpendicular to it from which on one side a nose extends over the pre-stamped weak opening line. On the other side of the cross-piece is a finger grip.

A reclosure plate is integrally formed onto the flange which, after rotation of the flange about a pivot on the lid can be pressed into the can opening to seal it. The complete opening system is mfd. by injection moulding polypropylene or ABS plastic of medium hardness and elasticity.

USE/ADVANTAGE - The opener is suitable for cans, e.g. drinks cans, with a preformed weak line for rapid opening, can be mfd., with a simpler process and tools and is safer to handle during opening.

Dwg.2/5

Title Terms: INJECTION; MOULD; PLASTIC; OPEN; SYSTEM; CAN; COMPRISE; FLANGE; CROSSPIECE; OPEN; NOSE; FINGER; GRIP; RECLOSABLE; PLATE; PIVOT; VERTICAL; AXIS

Derwent Class: A92; Q32; Q39

International Patent Class (Main): B65D-017/50

International Patent Class (Additional): B65D-008/02; B65D-025/38;

B67B-007/40

File Segment: CPI; EngPI

10/5/16 (Item 14 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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008762191 **Image available**
WPI Acc No: 1991-266205/199136

XRAM Acc No: C91-115398 XRPX Acc No: N91-203255

Moulded container - has body and cover portions joined by tear-off hinge

Patent Assignee: GRACE & CO-CONN W R (GRAC)

Inventor: ADAMS D W; AIKIN D S

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Applicat No Kind Date Kind Date Week US 5040695 Α 19910820 US 90548785 19900706 199136 B Α CA 2036180 Α 19920107 199214

Priority Applications (No Type Date): US 90548785 A 19900706

Abstract (Basic): US 5040695 A

Mould container has a hinge (16) joining a body and cover portions. The hinge comprises a relatively thick rib portion joined by relatively thin portions to the body and lid and a tear initiating portion (22) e.g. a T-shaped tab. The container is pref. injection or blow moulded from plastics. The plastics can be olefin polymer and

copolymers.

USE - For containers needing locking but relatively quick access e.g. fire arms or fire extinguishers. (5pp Dwg.no.5/5

Title Terms: MOULD; CONTAINER; BODY; COVER; PORTION; JOIN; TEAR-OFF; HINGE

Derwent Class: A92; Q32; Q39

International Patent Class (Additional): B65D-001/40 ; B65D-017/34 ;

B67D-001/22

File Segment: CPI; EngPI

10/5/17 (Item 15 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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008703997 **Image available** WPI Acc No: 1991-208018/199128

XRPX Acc No: N91-158867

Container closure with ring pull tear-away tab - uses weakening lines to define shape of opening and moulded runners to prevent accidently

Patent Assignee: POLYSTAR PACKAGING INC (POLY-N); POLYSTAR PACKAGING

(POLY-N)

Inventor: HEYN W M; ROTH D J

Number of Countries: 018 Number of Patents: 010

Patent Family:

	4 -							
Patent No	Kind	Date	App	olicat No	Kind	Date	Week	
WO 9108959	Α .	19910627					199128]
AU 9170782	Α	19910718					199142	
US 5125528	Α	19920630	US	89451812	Α	19891218	199229	
EP 506871	A 1	19921007	WO	90US7294	Α	19901218	199241	
			EP	91902820	Α	19901218		
JP 5502651	W	19930513	WO	90US7294	A	19901218	199324	
			JP	91503246	Α	19901218		
AU 649188	В	19940512	AU	9170782	Α.	19901218	199425	
EP 506871	В1	19950215	WO	90US7294	Α	19901218	199511	
			ΕP	91902820	Α	19901218		
DE 69017046	E	19950323	DĒ	617046	А	19901218	199517	
			WO	90US7294	A	19901218		
			ΕP	91902820	Α	19901218		
US 5830398	Α	19981103	US	89451812	Α	19891218	199851	
			US	92906316	A	19920630		
CA 2071939	С	20010724	CA	2071939	Α	19901218	200147	
			WO	90US7294	Α	19901218		

Priority Applications (No Type Date): US 89451812 A 19891218; US 92906316 A 19920630

Cited Patents: DE 3222655; FR 2380196; GB 1571391; US 3437227; US 4309952 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes WO 9108959 Α

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU

US 5125528 7 B65D-017/34 Α

EP 506871 A1 E 18 B65D-043/06 Based on patent WO 9108959

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE

JP 5502651 B65D-017/32 W Based on patent WO 9108959

AU 649188 В B29C-045/14 Previous Publ. patent AU 9170782

Based on patent WO 9108959

В

EP 506871 B1 E 11 B65D-043/06 Based on patent WO 9108959

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DE 69017046 B65D-043/06 Based on patent EP 506871 Based on patent WO 9108959 US 5830398 B29C-045/14 Div ex application US 89451812 Div ex patent US 5125528 С CA 2071939 Ε B65D-017/32 Based on patent WO 9108959 Abstract (Basic): WO 9108959 A The closure (32) is connected to the flange of a metal can body. Its_frame_(28)-and_tab repair runners (30) are moulded from the same plastics = material > The end panel (10), which is bonded to the frame, has a tearaway portion with a ring pull (12). This tab has die cut weakening lines (16,18) with a space between their inner arms so that the tab remains on the panel when opened. The tearaway portion as defined by the lines of weakening may be a variety of shapes such as teardrop, circular circular or half moon. USE/ADVANTAGE - Closure for food and beverage containers. Moulded runners preclude accidental rupture of weakening lines. DWg.3/16 Title Terms: CONTAINER; CLOSURE; RING; PULL; TEAR-AWAY; TAB; WEAK; LINE; DEFINE; SHAPE; OPEN; MOULD; RUNNER; PREVENT; ACCIDENT; SPLIT Derwent Class: Q32; Q33 International Patent Class (Main): B29C-045/14; B65D-017/32; B65D-017/34 B65D-043/06 International Patent Class (Additional): B29C-065/76; B29D-022/00; B65D-017/16; B65D-017/28; B65D-017/40 File Segment: EngPI 10/5/23 (Item 21 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2003 THOMSON DERWENT. All rts. reserv. 007087971 WPI Acc No: 1987-087968/198713 XRPX Acc No: N87-066017 Reclosable opening arrangement for packing container - has pouring edge strip between container and cover-strip, latter having gripping strip sealed to underside Patent Assignee: TETRA PAK INT AB (TETR) Inventor: HALLBERG A; JACOBSSON K; KJELGAARD T Number of Countries: 015 Number of Patents: 010 Patent Family: Patent No Kind Date Applicat No Kind Date Week EP 216239 Α 19870401 EP 86112419 19860908 Α 198713 AU 8662950 Α 19870326 198719 SE 8504351 Α 19870321 198720 NO 8603708 Α 19870413 198721 SE 451012 В 19870824 198736 US 4715528 Α 19871229 US 86905157 Α 19860909 198802 SU 1463132 Α 19890228 SU 4028216 Α 19860919 198951 EP 216239 19900131 В 199005 DE 3668598 G 19900308 199011 CA 1267613 Α 19900410 199019 Priority Applications (No Type Date): SE 854351 A 19850920 Cited Patents: A3...8731; DK 136811; EP 1134; FR 2357431; FR 2412464; No-SR.Pub; US 2784894 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes

Designated States (Regional): AT BE CH DE FR GB IT LI NL SE

EP 216239

US 4715528

A E

EP 216239 B E
Designated States (Regional): AT BE CH DE FR GB IT LI NL SE

Abstract (Basic): EP 216239 A

An openable cover strip (8) is used to close a pouring opening (6) in a container wall via a pouring edge strip (7). Applied to the underside of the cover strip is a gripping strip (9') which detachably grips the pouring edge strip.

Pref. the gripping strip is applied to the underside of a pull tab pull tab (7') of the cover strip. The gripping and cover strips are sealed together except at an area around the gripping edge (9'') of the gripping strip.

 ${\sf USE}$ - In a non-return package for e.g. beverages or liq. foodstuffs.

Title Terms: RECLOSABLE; OPEN; ARRANGE; PACK; CONTAINER; POUR; EDGE; STRIP; CONTAINER; COVER; STRIP; LATTER; GRIP; STRIP; SEAL; UNDERSIDE

Derwent Class: Q31; Q32; Q33; Q34

International Patent Class (Additional): B65B-005/70; B65D-003/26;

B65D-005/70; B65D-017/00; B65D-047/00; B65D-085/72

File Segment: EngPI

10/5/30 (Item 28 from file: 350) DIALOG(R) File 350: Derwent WPIX

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001027846

WPI Acc No: 1974-C3860V/197419

Easy-open with plastics tear tab - has a retaining member inside the can and secured to a projection of the tab

Patent Assignee: CEBAL G P (CEBA)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week GB 1352229 A 19740508 197419 B

Priority Applications (No Type Date): FR 7013593 A 19700415

Title Terms: EASY; OPEN; CAN; PLASTICS; TEAR; TAB; RETAIN; MEMBER; CAN;

SECURE; PROJECT; TAB

Derwent Class: Q32

International Patent Class (Additional): B65D-017/16

File Segment: EngPI

```
Set
        Items
                 Description
                 TAB? ? OR OPENER? ? OR PULLTAB?

JAR? ? OR CAN OR CANS OR CONTAINER? ?
        56579
S1
      4623236
S2
                 ELASTIC? OR FLEXIB? OR ELASTOMER? OR PLASTIC? OR NONRIGID?
S3
      1746501
             OR "NOT"()RIGID OR SOFT OR SUPPLE?
S4
         1806
                 S1 AND S2 AND S3 AND IC=B65D
S5
         1210
                 S3(S)S1 AND S2 AND IC=B65D
S6
         5440
                 S1(5N)S2
S7
          120
                 S6(10N)S3 AND IC=B65D ·
S8
          120
                 IDPAT (sorted in duplicate/non-duplicate order)
          120
                 IDPAT (primary/non-duplicate records only)
S9
S10_____S9_AND_IC=B65D-017_
? show files ·
File 347: JAPIO Oct 1976-2002/Dec(Updated 030402)
          (c) 2003 JPO & JAPIO
File 350: Derwent WPIX 1963-2003/UD, UM &UP=200325
          (c) 2003 THOMSON DERWENT
File 371: French Patents 1961-2002/BOPI 200209
          (c) 2002 INPI. All rts. reserv.
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FT Patents

7/5,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01428568

Container tab

PATENT ASSIGNEE:

INVENTOR:

Emmerzaal, Ad, Waterhoen 4, NL-7423 CP Deventer, (NL) LEGAL REPRESENTATIVE:

't Jong, Bastiaan Jacob (49911), Arnold & Siedsma, Advocaten en Octrooigemachtigden, Sweelinckplein 1, 2517 GK Den Haag, (NL)
PATENT (CC, No, Kind, Date): EP 1205392 Al 020515 (Basic)
APPLICATION (CC, No, Date): EP 2000203965 001110;

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI INTERNATIONAL PATENT CLASS: B65D-017/353

ABSTRACT EP 1205392 A1

The invention relates to a tab (170) for a container (1) comprising a wall (5) with a tear part for opening the container, said tab comprising:
- a rigid lever part (17), which is connectable to the tear part; and
- an operating part (172) for operating the lever part, which operating part is movably connected to the lever part, such that the operating part can be moved out of the plane of the rigid lever part.

ABSTRACT WORD COUNT: 78

NOTE: Figure number on first page: 1A

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 020515 Al Published application with search report Examination: 030115 Al Date of request for examination: 20021115 LANGUAGE (Publication, Procedural, Application): English; English; English

7/5,K/4 (Item 4 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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01074811

Container closure having a pull tab

PATENT ASSIGNEE:

ISHIDA CO., Ltd., (1640870), 44, Sanno-cho, Shogoin, Sakyo-ku, Kyoto-shi, Kyoto 606, (JP), (Applicant designated States: all)

Showa Denko Plastic Products Co. Ltd., (2319410), 7-13, Shibakouen 1-chome, Minato-ku, Tokyo 105-0011, (JP), (Applicant designated States: all)

INVENTOR:

Kobayashi, Yukio, 8-20-4, Chuo, Ota-ku, Tokyo, (JP)

Yamashita, Masato, 2512-1, Oaza-Shikata, Shikatsu-cho, Nishi-Kasugai-Gun, Aichi-ken, (JP)

LEGAL REPRESENTATIVE:

Hucker, Charlotte Jane (77101), Gill Jennings & Every Broadgate House, 7
Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 945355 A2 990929 (Basic)

the potent

EP 945355 A3 000419

APPLICATION (CC, No, Date): EP 99302299 990324;

PRIORITY (CC, No, Date): JP 9877007 980325

DESIGNATED STATES: DE; DK; ES; FR; GB; IT; NL; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B65D-017/40

ABSTRACT EP 945355 A2

There is provided a container closure which is easy to manufacture and also easy to open. The container closure (5) is provided with a peripheral section adapted to be attached to a peripheral edge portion of the top opening of a container body(11), and a panel section which is surrounded by the peripheral section. The panel section has a plastic material layer (6) on the face of a gas blocking substrate, and a score line (7) providing a weakened region in the plastic material layer on the periphery of the panel section. The panel section is provided with a pulling tab (8) for allowing a container to be opened along the score portion by raising the pulling tab. The pulling tab is integrally molded with the plastic material layer of the panel section through a thin hinge so that the pulling tab can be pulled up with respect to the panel section. A projection (9) made of plastic material and extending laterally with respect to the pulling tab, is molded integrally with the plastic material layer of the panel section adjacent to the front end of the pulling tab. An abutting end portion (9b) is formed at the front end of the pulling tab for contacting with the projection when the pulling tab is pulled up by a predetermined angle with respect to the panel section and for causing the panel section to be broken along the score portion by pushing the projection when the pulling tab is further pulled

ABSTRACT WORD COUNT: 252

NOTE: Figure number on first page: 6

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 001129 A2 Date of request for examination: 20001004
Search Report: 20000419 A3 Separate publication of the search report
Examination: 030122 A2 Date of dispatch of the first examination

report: 20021206

Assignee: 020612 A2 Transfer of rights to new applicant: ISHIDA

CO., Ltd. (1640870) 44, Sanno-cho, Shogoin,

Sakyo-ku Kyoto-shi, Kyoto 606 JP

Application: 990929 A2 Published application without search report LANGUAGE (Publication, Procedural, Application): English; English

SPECIFICATION Field of the Invention

The present invention relates to a **container** closure having a pulling **tab** for opening the **container** in which the closure is attached, in particular, to a container closure comprising a peripheral...

...least portions of the panel portion and the pulling tab are formed by molding a plastic material.

Disclosure of the Invention:

It is therefore an object of the present invention to...layer of the panel section through a thin walled hinge portion so that the pulling tab can be pulled up with respect to the panel section. A projection is molded integrally with the plastic material layer of the panel section adjacent to a front end portion of the pulling tab. The projection is made of a plastic

material and extends laterally with respect to the pulling tab. An abutting end portion is...

7/5,K/16 (Item 16 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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00320106

Container lid structure and process for manufacturing the same.

PATENT ASSIGNEE:

AJINOMOTO CO., INC., (201190), 5-8, Kyobashi 1-chome, Chuo-ku, Tokyo 104, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Kobayashi, Yukio c/o AJINOMOTO CO., INC., Central Research Laboratories 11, Suzukicho, Kawasakiku Kanagawaken, (JP)

Sasaki, Hithoshi c/o AJINOMOTO CO., INC., Central Research Laboratories 11, Suzukicho, Kawasakiku Kanagawaken, (JP)

Igota, Shoji c/o AJINOMOTO CO., INC., Central Research Laboratories 11, Suzukicho, Kawasakiku Kanagawaken, (JP)

LEGAL REPRESENTATIVE:

Bond, Bentley George et al (28441), Haseltine Lake & Co. 28 Southampton Buildings Chancery Lane, London WC2A 1AT, (GB)

PATENT (CC, No, Kind, Date): EP 322238 Al 890628 (Basic)

EP 322238 B1 920422

APPLICATION (CC, No, Date): EP 88312212 881222;

PRIORITY (CC, No, Date): JP 87322889 871222; JP 88258323 881013

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: B65D-017/28

CITED PATENTS (EP A): US 4309952 A; US 4155481 A; EP 117125 A; DE 3222655 A; US 3499573 A

ABSTRACT EP 322238 A1

A container lid structure 1 made essentially of plastics includes a lid frame 3 and a lid plate 4. The lid plate 3 typically includes an inner layer 8 comprising a metal foil coated on the opposite sides by plastic layers and connected at the peripheral portion with the lid frame 3 and a core 10 made of a material which does not adhere to or bonds only weakly to the plastic materials for the lid frame 3 and for the inner layer 8. The core 10 is laid over the inner layer 8 with its peripheral portion in an abutting relationship with the inner periphery of the lid frame 3. A holding member 7 may be formed on the core 10 and bonded to the inner layer 8 through apertures 12 in the core. A pulling tab 5 is also formed on the core 10 and bonded to the inner layer 8 through an aperture 13 in the core.

ABSTRACT WORD COUNT: 164

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 890628 Al Published application (Alwith Search Report

;A2without Search Report)

Examination: 891129 A1 Date of filing of request for examination:

891002

Examination: 910508 Al Date of despatch of first examination report:

910322

Grant: 920422 B1 Granted patent

Oppn None: 930414 Bl No opposition filed

LANGUAGE (Publication, Procedural, Application): English; English; English

...SPECIFICATION lid structure, and more particularly to a container lid structure provided with a lid opening tab. More specifically, the present invention pertains to a container lid structure which is totally or mostly made of plastic material.

A container lid structure having a finger **gripping tab** for **opening** the **container** has been widely adopted **for** example in a **metal can**. It has also been proposed for example by the Japanese patent laid-open application 57...

...patent laid-open application 59-31131 to provide a container lid structure having such a **container** opening **tab by** a **plastic** forming technique. The **proposed container lid** structure includes **a** lid frame adapted to be attached to a container barrel and a lid plate encircled...

...portion with a transversely extending groove 5c. With the aid of the groove 5c, the tab 5 can be raised for the opening operation with a relatively small effort. In the opening operation, the shoulder...

7/5,K/19 (Item 19 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00290421

A system for forming an opening in a container end member.

PATENT ASSIGNEE:

ADOLPH COORS COMPANY, (521870), 17755 West 32nd Avenue, Golden Colorado 80401, (US), (applicant designated states:

AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE)

INVENTOR:

Moen, Bruce Allen, 2017 Table Drive, Golden Colorado 80401, (US) LEGAL REPRESENTATIVE:

Baillie, Iain Cameron et al (27951), c/o Ladas & Parry Isartorplatz 5, D-8000 Munchen 2, (DE)

PATENT (CC, No, Kind, Date): EP 289022 A2 881102 (Basic) EP 289022 A3 900103

APPLICATION (CC, No, Date): EP 88106839 880428;

PRIORITY (CC, No, Date): US 45369 870501; US 168428 880315

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: B65D-017/34

CITED PATENTS (EP A): FR 2293369 A; FR 2293369 A; EP 117125 A; EP 117125 A; US 4039099 A; US 3383008 A

ABSTRACT EP 289022 A2

A container end member (10) provided with a score line groove (60) defining a severable tab portion (58) that can be severed by applying an inwardly directed force thereto and a hinge portion (78) for retaining the severable tab portion (58) attached to the container end member (10) and a one-piece integrally formed plastic member (88) pivotally secured to the container end member (10) and comprising an elongated body portion (92) having an abutment end portion (98) overlying a portion of the severable tab portion (58) for applying the axially inwardly directed force thereto and a transverse handle end portion (94) overlying another portion of the container end member (10) so that when an axially

outwardly directed force is applied to the transverse handle end portion (94), the elongated body portion (92) will pivot relative to the container end member (10) so that the transverse abutment end portion (98) will apply the axially inwardly directed force to the portion of the severable tab portion (58) to sever the severable tab portion (58) along the score line groove (60) and form an outlet opening in the container end member.

ABSTRACT WORD COUNT: 192

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 881102 A2 Published application (Alwith Search Report

; A2without Search Report)

Search Report: 900103 A3 Separate publication of the European or

International search report

Examination: 900822 A2 Date of filing of request for examination:

900531

Withdrawal: 930505 A2 Date on which the European patent application

was deemed to be withdrawn: 921031

LANGUAGE (Publication, Procedural, Application): English; English; English

...SPECIFICATION therein may be readily removed therefrom and more particularly to an ecology type of beverage **container** end member wherein a **tab** means which is displaced to form the opening remains permanently secured to the container end...

...end member wherein a portion of the system for forming an opening in the beverage container end member includes a plastic tab .

In the commercial marketing of beverages, such as beer and soft drinks, it is highly...

...the container end member is provided with severable score line groove means defining a severable tab portion that can be severed along the score line groove means by applying an inwardly directed force thereto and a hinge portion for retaining the severed tab portion attached to the container end member. A force applying means for applying the inwardly directed force to sever the severable tab portion is provided and comprises an integral plastic member having an elongated body portion having a central longitudinal axis and an integral attachment means portion for securing the integral plastic member to the container end member. The elongated body portion has a generally transverse abutment means portion and the elongated body portion provides for pivotal movement of the plastic member on the container end member so that when an axially outwardly directed force is...

7/5,K/25 (Item 25 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

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00836470 **Image available**

LASER-ETCHED PULL TAB CONTAINER OPENING DEVICES AND METHODS OF MAKING THE SAME

Patent Applicant/Inventor:

STASIUK Joseph W, 3 Glen Eden Retreat, Glen Eden Sound, KY, -- (Residence), CA (Nationality)

Legal Representative:

MITCHELL Robert (et al) (agent), Swabey Ogilvy Renault, Suite 1600, 1981 McGill College Avenue, Montreal, Quebec H3A 2Y3, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200168460 A2-A3 20010920 (WO 0168460)
Application: WO 2001CA316 20010312 (PCT/WO CA0100316)
Priority Application: US 2000188681 20000313; CA 2307074 20000428

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: B65D-017/00

Publication Language: English

Filing Language: English

English Abstract

A device and method for opening containers utilizing laser-etched pull tabs and methods of making the same. According to the invention, indicia is laser-etched on a pull tab substrate, which may be made of any suitable material, by selective laser ablation of the substrate with a laser marker. The laser marker is preferably capable of ablating the substrate's surface to any desired depth, including depths of between 1 to 50 microns and depths that enable the etching to be detected by touch. The invention also contemplates removing one or more coating layers in addition to a portion of the exposed pull tabs surface through laser ablation to generate visually contrasting indicia for promoting or decorating the substrate surface. The pull tabs of the present invention have consistent, high definition indicia that is both tamper resistant and permanent.

Legal Status (Type, Date, Text)

Publication 20010920 A2 Without international search report and to be republished upon receipt of that report.

Search Rpt 20020425 Late publication of international search report Republication 20020425 A3 With international search report.

Detailed Description

... be made of any suitable material which is capable of fimetioning of as a cpull tab for a container including aluminum, steel, plastic, other metals, and or any natural, synthetic, composite, or other suitable material. The selection of...to the invention, may comprise any material capable of use 1 5 as a pull tab container opening device. Exemplary materials include aluminum, steel, plastic, or any natural, synthetic, composite, or other suitable material. Similarly, combinations of materials as layers...

7/5,K/44 (Item 44 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

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00252202

EASY OPENING TAB FOR CONTAINER

LANGUETTE D'OUVERTURE FACILE DESTINEE A UN RECIPIENT METALLIQUE

Patent Applicant/Assignee:

GARBISO Michael Joseph,

Inventor(s):

GARBISO Michael Joseph,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9400353 A1 19940106

Application: WO 93US5837 19930617 (PCT/WO US9305837)

Priority Application: US 92902066 19920622

Designated States: AU BR CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT

3

SE

Main International Patent Class: B65D-017/34

Publication Language: English

English Abstract

A container opening tab (24) having a ring (26) at one end and an opposite free end is pivotally mounted between its ends on a container wall (14) having a pair of raised formations (32, 34), such as inclined ramp formations. The tab (24) is rotatable about a first axis (30) normal to the wall between a storage position in which the tab lies flat against the wall with the tab ring encircling one raised formation and the other raised formation disposed along one longitudinal side of the ring (26), and a container opening position in which the tab ring seats on the raised formation (32, 34) to space the ring from the wall, and the free tab end overlies an integral frangible seal (16) forming portion of the wall. While in its container opening position, the tab is rotatable about a second axis transverse to both the first axis and the longitudinal axis of the tab to press the tab free end against and thereby rupture the frangible seal (16).

Detailed Description

... lower seal side in the drawings), by a bendable juncture 22 forming a hinge. A **container** easy opening **tab** 24 having a ring-shaped lifting end 26 and an opposite free end 28 is...

 \dots 30. In this case, the pivot means 30 is a rivet which extends through a **flexible** lip 31 on

7/5,K/45 (Item 45 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

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00208808

RECLOSABLE CONTAINER CLOSURE

FERMETURE REFERMABLE POUR RECIPIENT

Patent Applicant/Assignee:

POLYSTAR PACKAGING INCORPORATED,

Inventor(s):

ROTH Donald J.

HEYN William M,

SAUER Donald G,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9206011 A1 19920416

Application: WO 91US6955 19910927 (PCT/WO US9106955)

Priority Application: US 90275 19901001

Designated States: AT AT AU BB BE BF BG BJ BR CA CF CG CH CH CI CM DE DE DK DK ES ES FI FR GA GB GB GN GR HU IT JP KP KR LK LU LU MC MG ML MR MW NL

NL NO PL RO SD SE SE SN SU TD TG

Main International Patent Class: B65D-017/00

Publication Language: English

English Abstract

A reclosable closure for containers of the type used for keeping or storing product for some time following initial opening of the container. Typical uses would be for snack foods such as candies, peanuts, etc., and powdered products such as sugar, coffee, tea and other beverage mixes and the like. The closure also is adaptable for use with canned vegetables and meats and also with non-food products such as, for example, nails, tacks and a myriad of similar hardware items. The preferred closure includes an end panel (20) and ring-shaped frame member (22) which are fused or otherwise adhered together during insert-injection molding of the frame member. Means are provided on the frame member for contacting an edge of the end panel, or an integral pull tab (34) thereon, for restraining the end panel in a position for reclosing the container.

Detailed Description

- ... tab 34 includes a 15 cut line 35 which provides an opening so that pull tab 34 can open into the form of a pull ring. Upon the application of an upward pulling...
- ...20 is provided with a coined hinge 38, which may be cold-formed in the **plastic** sheet material,, the hinge 38 being located at and extending between the spaced lugs or...

```
Set
        Items
                 Description
                 TAB? ? OR OPENER? ? OR PULLTAB?

JAR? ? OR CAN OR CANS OR CONTAINER? ?
S1
         56198
S2
      1221310
s3
       804845
                 ELASTIC? OR FLEXIB? OR ELASTOMER? OR PLASTIC? OR NONRIGID?
              OR "NOT" () RIGID OR SOFT OR SUPPLE?
S4
          8838
                 S1(5N)S2
S5
           .52
                 S4(S)S3 AND IC=B65D-017
S6
            52
                 IDPAT (sorted in duplicate/non-duplicate order)
'Sname of DPATE (primary/non-duplicate records only)
? show files
File 348:EUROPEAN PATENTS 1978-2003/Apr W03
          (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030424,UT=20030417
          (c) 2003 WIPO/Univentio
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(Item 5 from file: 51)
DIALOG(R) File 51: Food Sci. & Tech. Abs
(c) 2003 FSTA IFIS Publishing. All rts. reserv.
00083787 74-08-f0342
                        SUBFILE: FSTA
 Easy-opening can ends having plastics tear tabs .
  Cebal, GP
  PATENT CO.: British Patent 1974
  PATENT NO.: 1 352 229
  DOCUMENT TYPE: Patent
  LANGUAGE: English
  Abstract not Available
  DESCRIPTORS: closures -- can ends with plastics tear tabs, Patent
 plastics -- can ends with plastics tear tabs , Patent; cans --
plastics tear tabs for ends of cans , Patent
  SECTION HEADINGS: Food Packaging (SC=f)
 9/5/11
           (Item 2 from file: 53)
DIALOG(R) File 53: FOODLINE(R): Food Science & Technology
(c) 2003 LFRA. All rts. reserv.
         FOODLINE ACCESSION NUMBER: 529467
00848234
Device for opening a drink can.
Skovajsa J
PATENT: WO 0037352 A1
APPLICATION COUNTRY: FR (DATE(S):19981222)
PRIORITY APPLICATION DATE: 19991221
DESIGNATED STATES:
    SeepublishedpatentdocumentforDesignatedContractingStates.
X-REFERENCE: FOOD PACKAGING
LANGUAGE: French
SUMMARY LANGUAGE: English
DOCUMENT TYPE: Patent
FOODLINE UPDATE CODE: 20000810
ABSTRACT: A one-piece plastic opener for food and beverage cans has a
    handle with a hook at one end plus a downward-pointing projection
    between the hook and the handle. The hook engages the eyelet in the
    pull-tab of the can.
SECTION HEADING: PACKAGING
DESCRIPTORS: CAN OPENERS; CANS; CATERING EQUIPMENT; CONTAINERS;
    EQUIPMENT; OPENING EQUIPMENT; PACKAGING CONTAINERS; PACKAGING
    PRODUCTS; PATENT; PCT PATENT
 9/5/32
           (Item 12 from file: 240)
DIALOG(R) File 240: PAPERCHEM
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.
00184697
               PAPERCHEM NO: AB5310966
  Easy-Open Lid Closure Arrangement
  Helms, C. R.; Container Corp. of America
  PATENT NUMBER: US 4360121 PATENT DATE: 821123 PATENT CLASS#: 220/270
PATENT APP# - DATE OF APPLICATION
  US 248294 - 810327
  SOURCE: U.S. pat. 4,360,121. Issued Nov. 23, 1982. 5 claims. 4 p.
Cl.220/270. Filed: U.S. appln. 248,294 (March 27, 1981).
  PUBLICATION YEAR: 1982
  DOCUMENT TYPE: PATENT
```

LANGUAGES: ENGLISH

A container lid comprises a plastic rim surrounding a central portion made of pbd., together with a pull tab which can be used to force part of the pbd. away from the plastic rim, to facilitate the subsequent complete removal of the pbd. portion.

DESCRIPTORS: CLOSURES; ENGLISH; OPENING FEATURES; PACKAGE DESIGN; PAPER BOARD CONTAINERS; PATENTS; PLASTICS; RIMS; TABS; UNITED STATES

FILE SEGMENT: AB (IPST Abstract Bulletin non-patents)

9/5/84 (Item 14 from file: 252) DIALOG(R) File 252: Packaging Sci&Tech

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017287 87-01-k0004

(Beverage can.)

Getraenkedose

Scavo, G.

German Federal Republic Patent Application, 1986, DE 34 32 554 A1

Language: De

Document Type: Patent

The described beverage can has a tear-open tab preferably in the lid and has a plastics drinking spout which is inside the unopened can. The spout is preferably formed with a support disk in 1 piece, and is flanged with the lid. The spout can be closed by applying optional extra parts; alternatively, the spout can be pushed inside the can and the can opening ist then closed up. (RAB)

Descriptors: Can - Can - Reclosable closure - Tear flap - Spout - Patent

```
Set
        Items
                Description
S1
       196809
                TAB? ? OR OPENER? ? OR PULLTAB?
                JAR? ? OR CAN OR CANS OR CONTAINER? ?
S2
      4571471
S3
      2925840
                ELASTIC? OR FLEXIB? OR ELASTOMER? OR PLASTIC? OR NONRIGID?
             OR "NOT" () RIGID OR SOFT OR SUPPLE?
$4
         2456
                S1 (5N) S2
S5
          420
                S3(S)S4
S6
           96
                S3 (5N) S4
S7
           91
                S6 NOT PY>2000
                RD (unique items)
           87
           87 -- S8 NOT PD>20001120
? show files
File
       6:NTIS 1964-2003/Apr W4
         (c) 2003 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2003/Apr W3
File
         (c) 2003 Elsevier Eng. Info. Inc.
File
      31:World Surface Coatings Abs 1976-2003/Mar
         (c) 2003 Paint Research Assn.
      34:SciSearch(R) Cited Ref Sci 1990-2003/Apr W3
File
         (c) 2003 Inst for Sci Info
File
      51:Food Sci.&Tech.Abs 1969-2003/Apr W3
         (c) 2003 FSTA IFIS Publishing
      53:FOODLINE(R): Food Science & Technology 1972-2003/Apr 28
File
         (c) 2003 LFRA
File
      65:Inside Conferences 1993-2003/Apr W3
         (c) 2003 BLDSC all rts. reserv.
File
      94:JICST-EPlus 1985-2003/Apr W3
         (c) 2003 Japan Science and Tech Corp(JST)
     99:Wilson Appl. Sci & Tech Abs 1983-2003/Mar
File
         (c) 2003 The HW Wilson Co.
File 144: Pascal 1973-2003/Apr W3
         (c) 2003 INIST/CNRS
File 240: PAPERCHEM 1967-2003/Apr W4
         (c) 2003 Elsevier Eng. Info. Inc.
File 248:PIRA 1975-2003/Apr W3
         (c) 2003 Pira International
File 252: Packaging Sci&Tech 1982-1997/Oct
         (c) 1997 by Fraunhofer-ILV, Germany
File 323:RAPRA Rubber & Plastics 1972-2003/Apr
          (c) 2003 RAPRA Technology Ltd
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
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